

APPENDIX D

ADDITIONAL DATA ON

DEPARTMENT OF ENERGY SITES

Exhibit D-1: DOE Installations and Other Locations Where Remedial Action is Ongoing or Completed¹

State	Installation/Site	Program ²	Status ³	No. of Operable Units ^{3,4}	Estimated Budget FY 1997 (millions) ³	Estimated Life-Cycle Cost (millions) ³
AK	Project Chariot	ER	RA complete			
AZ	Monument Valley Site	ER/UMTRA	RA complete (surface)			
	Tuba City Site	ER/UMTRA	RA complete (surface)			
CA	Energy Technology Engineering Center	ER (including D&D)	RA, D&D ongoing	16 ⁵	\$4.2 ⁵	\$131.0 ⁵
	Lawrence Livermore Laboratory	ER (including D&D)	RA ongoing	11	\$22.5	\$639.0
	Rockwell International	ER (including D&D)	RA, D&D ongoing	6		
	Sandia National Laboratory - Livermore	ER	RA ongoing	4	\$1.9	\$13.5
	University of California	ER/FUSRAP	RA complete			
CO	Durango Site	ER/UMTRA	RA complete (surface)			
	Grand Junction Mill Tailing Site	ER/UMTRA	RA ongoing (surface)	1	\$12.8	\$73.3
	Grand Junction Projects Office Site	ER (including D&D)	RA ongoing	1	\$10.3	\$466.9
	Gunnison	ER/UMTRA	RA ongoing (surface)	1	\$0.9	\$12.3
	Maybell	ER/UMTRA	RA ongoing (surface)	1	\$4.3	\$22.3
	Naturita	ER/UMTRA	RA ongoing	1	\$13.4	\$43.0
	Old North Continent (Slick Rock)	ER/UMTRA	RA ongoing (surface)	1	\$9.1 ⁷	\$32.9 ⁷
	Rifle Mill (Old and New)	ER/UMTRA	RA ongoing (surface)	2	\$1.4	\$20.3
Union Carbide (Slick Rock)	ER/UMTRA	RA ongoing (surface)	2	8	8	

Exhibit D-1: DOE Installations and Other Locations Where Remedial Action is Ongoing or Completed (continued)¹

State	Installation/Site	Program ²	Status ³	No. of Operable Units ^{3,4}	Estimated Budget FY 1997 (millions) ³	Estimated Life-Cycle Cost (millions) ³
CT	Combustion Engineering	ER/FUSRAP	RA ongoing	1	\$43.7	\$233.9
	Seymour Specialty Wire	ER/FUSRAP	RA complete			
ID	Idaho National Engineering Laboratory	ER (including D&D) on NPL	D&D, RA ongoing	106	\$112.8	\$3,049.1
	Lowman Site	ER/UMTRA	RA complete			
IL	Fermi National Accelerator Laboratory	No Environmental Restoration activities planned				
	Granite City Steel	ER/FUSRAP	RA complete			
	National Guard Armory	ER/FUSRAP	RA complete			
	University of Chicago	ER/FUSRAP	RA complete			
KY	Maxeys Flats	ER on NPL	DOE is funding a portion of this cleanup as a Potentially Responsible Party; cleanup is being carried out by the State of Kentucky under a ROD issued by EPA in 1991.			
MA	Ventron Corporation	ER/FUSRAP	RA ongoing	1	NA	NA
MI	General Motors	ER/FUSRAP	RA completed			
MO	Kansas City Plant	ER (including D&D)	RA ongoing	13	\$3.5	\$28.1
	Latty Avenue Properties (includes Hazelwood Interim Storage Site and Futura Coatings)	ER/FUSRAP on NPL	RA ongoing	2	⁹	¹⁰
	St. Louis Airport Site Vicinity Properties	ER/FUSRAP on NPL	RA ongoing	1	⁹	¹⁰
	St. Louis Downtown Site	ER/FUSRAP	RA ongoing	1	⁹	¹⁰
	Weldon Spring Site	ER (including D&D) on NPL	RA ongoing	8	\$66.0	\$447.9
MS	Salmon Test Site	ER	RA ongoing	2	\$2.9 ¹¹	\$7.7 ¹¹
NE	Hallam Nuclear Power Facility	ER (D&D only)	D&D complete; S&M ongoing			

Exhibit D-1: DOE Installations and Other Locations Where Remedial Action is Ongoing or Completed (continued)¹

State	Installation/Site	Program ²	Status ³	No. of Operable Units ^{3,4}	Estimated Budget FY 1997 (millions) ³	Estimated Life-Cycle Cost (millions) ³
NJ	Kellex/Pierpont	ER/FUSRAP	RA complete			
	Middlesex Municipal Landfill	ER/FUSRAP	RA complete			
	Middlesex Sampling Plant	ER/FUSRAP	RA ongoing	1	\$2.8	\$24.8
NM	Acid/Pueblo Canyon	ER/FUSRAP	RA complete			
	Ambrosia Lake	ER/UMTRA	RA ongoing (surface)	1	\$0.2	\$1.2
	Bayo Canyon	ER/FUSRAP	RA complete			
	Chupadera Mesa	ER/FUSRAP	RA complete			
	Inhalation Toxicology Research Institute	ER	RA ongoing	4	\$0.395	\$2.2
	Los Alamos National Laboratory	ER (including D&D)	D&D, RA ongoing	6	\$53.2	\$623.7
	Pagano Salvage	ER	RA complete			
	Shiprock Site	ER/UMTRA	RA complete (surface)			
	South Valley Superfund Site	ER on NPL	DOE does not manage the cleanup project at this site; it is responsible for reimbursing General Electric, which currently owns the site, for cleanup costs. Soil and groundwater remedies already have been chosen.			
	Waste Isolation Pilot Plant	No environmental restoration, waste management only				
NY	Baker-Williams Warehouse	ER/FUSRAP	RA complete			
	Colonie Interim Storage	ER/FUSRAP	RA ongoing	1	NA	NA
	Niagara Falls Storage	ER/FUSRAP	RA complete			
	Niagara Falls Vicinity Properties	ER/FUSRAP	RA complete			
	West Valley Demonstration Project	Site of DOE vitrification process demonstration to be conducted from 1996 through 1998. DOE will be responsible only for cleanup of facilities used in the demonstration; State of New York owns site.				

Exhibit D-1: DOE Installations and Other Locations Where Remedial Action is Ongoing or Completed (continued)¹

State	Installation/Site	Program ²	Status ³	No. of Operable Units ^{3,4}	Estimated Budget FY 1997 (millions) ³	Estimated Life-Cycle Cost (millions) ³
OH	Alba Craft	ER/FUSRAP	RA complete			
	Associated Aircraft and Tool	ER/FUSRAP	RA ongoing	1	NA	NA
	Baker Brothers	ER/FUSRAP	RA complete			
	Battelle Columbus Laboratories	ER (including D&D)	D&D ongoing	16	\$4.0	\$101.1
	Fernald Site	ER on NPL	RA, D&D ongoing	11	\$260.3	\$2,523.7
	HHM Safe Company	ER/FUSRAP	RA complete			
	Piqua Nuclear Power Facility	ER (D&D only)	S/M ongoing	1	0	\$0.3
	Portsmouth Gaseous Diffusion Plant	ER (including D&D)	RA, D&D ongoing	30	\$45.9	\$3,959.7
OR	Albany Metallurgical Research Center	ER/FUSRAP	RA complete			
	Lakeview Site	ER/UMTRA	RA complete (surface)			
PA	Aliquippa Forge	ER/FUSRAP	RA complete			
	Canonsburg Site	ER/UMTRA	RA complete (surface)			
	C.H. Schnoor	ER/FUSRAP	RA complete			
	Shippingport Atomic Power Station	ER	RA complete			
SC	Savannah River Site	ER (including D&D) on NPL	RA ongoing	92	\$111.7	\$12,687.0
TN	Elza Gate	ER/FUSRAP	RA complete			
	Oak Ridge Associated Universities	ER on NPL	RA ongoing	2	\$0.0	\$24.0
TX	Falls City Site	ER/UMTRA	RA complete (surface)			
UT	Green River Site	ER/UMTRA	RA complete (surface)			
	Mexican Hat Site	ER/UMTRA	RA complete (surface)			
	Monticello Remedial Action Project	ER on NPL (2 sites)	RA ongoing	3	\$21.2	\$109.9
	Salt Lake City Site	ER/UMTRA	RA complete (surface)			

Exhibit D-1: DOE Installations and Other Locations Where Remedial Action is Ongoing or Completed (continued)¹

State	Installation/Site	Program ²	Status ³	No. of Operable Units ^{3,4}	Estimated Budget FY 1997 (millions) ³	Estimated Life-Cycle Cost (millions) ³
WA	Hanford Site	ER (including D&D) on NPL (4 sites)	RA ongoing	78	\$138.8	\$8,349.2
WY	Riverton Site	ER/UMTRA	RA complete (surface)			
	Spook Site	ER/UMTRA	RA complete (surface)			
ER = Environmental Restoration UMTRA = Uranium Mill Tailing Remedial Action C/A = Characterization and assessment D&D = Decontamination and Decommissioning RA = Remedial Action NPL = National Priorities List IA = Interim Action S/M = Surveillance and monitoring FUSRAP = Formerly Utilized Sites Remedial Action Program						
Notes: ¹ This table includes installations and other locations where remedial action is in progress or has been completed for some or all operable units. Some installations and other locations included here also may appear in Exhibit A-1, because characterization and assessment still may be in progress at some operable units. These installations are included on both tables, because they continue to represent opportunities for vendors of remedial technologies. ² U.S. Department of Energy, "The 1996 Baseline Environmental Report," DOE/EM-0290, June 1996. ³ U.S. Department of Energy, "The 1996 Baseline Environmental Report," DOE/EM-0290, June 1996, and data as of June 1996 from DOE's "1996 Baseline Environmental Report" Database and other internal DOE databases provided by the Systems Management Division, Office of Program Integration, Office of Environmental Restoration, and interviews with selected site operations staff at DOE Headquarters. Actual Congressional appropriations for FY 1997 may differ from the amounts printed here. Data on operable units and life-cycle costs come from several different sources, which are continuously being revised by DOE staff as conditions at specific installations and other locations change and as new sites are identified. In addition, these data were extracted from these sources at different times. Therefore, although these data provide an indication of the approximate level of effort needed at a given location, their sum may not accurately reflect the program total. ⁴ An "operable unit" consists of one or more "sites" (individual areas of contamination). DOE aggregates sites with similar characteristics or sources into operable units to facilitate remedy selection and operations for all its remediation projects, whether they are conducted under CERCLA, RCRA, or other authorities. ⁵ Includes both Energy Technology Engineering Center and Rockwell International site. ⁶ See Energy Technology Engineering Center entry. ⁷ Includes Old North Continent (Slick Rock) and Union Carbide (Slick Rock) sites. ⁸ See Old North Continent (Slick Rock). ⁹ Total estimated FY97 budget for all Missouri FUSRAP sites is \$10.4 million. Site-by-site estimates are not available. ¹⁰ Total estimated life-cycle cost for all Missouri FUSRAP sites is \$243.8 million. Site-by-site estimates are not available. ¹¹ Work at Amchitka Island (AK), Project Rio Blanco and Project Rulison (CO), Salmon Test Site (MS), Project Gassbuggy and Gnome-Coach Site (NM), and the Central Nevada, Shoal, and Tonopah Test Sites (NV) is managed by and funded through DOE's Nevada Operations Office.						

Exhibit D-2: Contaminants and Contaminated Media Volumes To Be Remediated at DOE Installations Where Characterization and Assessment Are Ongoing¹

State	Installation/Site	Examples of Contaminants of Concern ^{2,3}	Estimated Soil/Sediment Volume To Be Addressed (Cu. Yds.) ⁴	Estimated Ground-water Volume To Be Remediated (Cu. Yds.) ⁴	Estimated Rubble/Debris Volume To Be Remediated (Cu. Yds.) ⁴
AK	Amchitka Island	Organic compounds, hydrocarbons, radionuclides, beryllium, lead	9,000	104,900	5,320
AZ	Monument Valley	Cadmium, chromium, molybdenum, net gross alpha, nitrate, radium-226/228, selenium, uranium (ground water)	Complete	Undetermined	NA
	Tuba City	Net gross alpha, nitrate, selenium, uranium (ground water)	Complete	Undetermined	NA
CA	Energy Technology Engineering Center	Radioactive and chemical waste (soil and buildings); solvents, tritium, alpha and beta radioactivity, radium (ground water)	Not reported	Not reported	Not reported
	General Atomics	Low-level radioactive waste, low-level mixed waste, asbestos, lead	Undetermined	Undetermined	Undetermined
	General Electric/Vallecitos Nuclear Center	Low-level radioactive waste and transuranic waste	NA	NA	20
	Geothermal Test Facility	Salts and minerals (sediments and debris); arsenic (soil and debris); asbestos (building materials)	11,960	NA	Not reported
	Laboratory for Energy-Related Health Research	Nitrates, chromium, chloroform, tritium, carbon (ground water); low-level radioactive waste (soil); low-level radioactive waste, asbestos, chemical and biological waste (buildings and facilities)	810	Undetermined	520

**Exhibit D-2: Contaminants and Contaminated Media Volumes To Be Remediated
at DOE Installations Where Characterization and Assessment Are Ongoing (continued)¹**

State	Installation/Site	Examples of Contaminants of Concern^{2,3}	Estimated Soil/Sediment Volume To Be Addressed (Cu. Yds.)⁴	Estimated Ground-water Volume To Be Remediated (Cu. Yds.)⁴	Estimated Rubble/Debris Volume To Be Remediated (Cu. Yds.)⁴
CA (con- tinued)	Lawrence Berkeley Laboratory	Chlorinated hydrocarbons, solvents, tritium, motor fuels (ground water); radioactive and mixed waste (soil and buildings)	50	181,700	12,200
	Lawrence Livermore Laboratory	VOCs, fuel hydrocarbons, depleted uranium, PCBs, high explosives (soil); tritium, chlorinated hydrocarbons, TCE (ground water); radioactive and hazardous waste, asbestos (buildings)	2,307,000	1,753,000	Not reported
	Oxnard	PCBs, tetrachloroethane, fuel products (soil)	Undetermined	Undetermined	Undetermined
	Salton Sea Test Base	Radioactive and chemical waste	Undetermined	Undetermined	Undetermined
	Stanford Linear Accelerator Center	PCBs, petroleum hydrocarbon, lead (soil); VOCs, TCE (ground water)	111,100	2,614,380	980
CO	Durango	Arsenic, cadmium, lead, molybdenum, net gross alpha, selenium, uranium (ground water)	Complete	Undetermined	NA
	Grand Junction Mill Tailing Site	Radon, heavy metals, radium, thorium (soil); molybdenum, net gross alpha, selenium, uranium (ground water)	45,440 (RA ongoing)	117,380	3,550
	Gunnison	Cadmium, uranium (ground water)	345,485 (RA ongoing)	Undetermined	NA
	Maybell	Arsenic, cadmium, molybdenum, nitrate, radium-226/228, selenium, uranium (ground water)	2,800,000 (RA ongoing)	Undetermined	NA

**Exhibit D-2: Contaminants and Contaminated Media Volumes To Be Remediated
at DOE Installations Where Characterization and Assessment Are Ongoing (continued)¹**

State	Installation/Site	Examples of Contaminants of Concern^{2,3}	Estimated Soil/Sediment Volume To Be Addressed (Cu. Yds.)⁴	Estimated Ground-water Volume To Be Remediated (Cu. Yds.)⁴	Estimated Rubble/Debris Volume To Be Remediated (Cu. Yds.)⁴
CO (con- tinued)	Naturita	Arsenic, molybdenum, net gross alpha, radium-226/228, selenium, uranium (ground water)	704,000 (RA ongoing)	Undetermined	NA
	Old North Continent (Slick Rock)	Radon, heavy metals, radium, thorium (soil); selenium, uranium (ground water)	Not reported	Undetermined	NA
	Project Rio Blanco	Organic compounds, hydrocarbons, radionuclides, beryllium, lead	6,000 ⁵	Undetermined	Undetermined
	Project Rulison	Organic compounds, hydrocarbons, radionuclides, beryllium, lead	⁶	Undetermined	Undetermined
	Rifle Mill (New)	Radon, heavy metals, radium, thorium (soil); arsenic, barium, cadmium, chromium, lead, molybdenum, net gross alpha, nitrate, radium-226/228, selenium, uranium (ground water)	2,000,000	Undetermined	NA
	Rifle Mill (Old)	Radon, heavy metals, radium, thorium (soil); arsenic, barium, cadmium, chromium, lead, molybdenum, net gross alpha, radium 226/228, selenium, uranium (ground water)	259,000	Undetermined	NA
	Rocky Flats	Plutonium, americium, uranium, VOCs, PAHs, beryllium (soils); nitrates, metals, solvents (ground water); radionuclides, metals, VOCs, PCBs (surface water)	414,900	1,550,000	Undetermined
	Union Carbide (Slick Rock)	Radon, heavy metals, radium, thorium (soil); cadmium, molybdenum, net gross alpha, nitrate, radium226/228, selenium, uranium (ground water)	Not reported	Undetermined	NA
FL	Pinellas Plant	VOCs	10	91,500	30

**Exhibit D-2: Contaminants and Contaminated Media Volumes To Be Remediated
at DOE Installations Where Characterization and Assessment Are Ongoing (continued)¹**

State	Installation/Site	Examples of Contaminants of Concern ^{2,3}	Estimated Soil/Sediment Volume To Be Addressed (Cu. Yds.) ⁴	Estimated Ground-water Volume To Be Remediated (Cu. Yds.) ⁴	Estimated Rubble/Debris Volume To Be Remediated (Cu. Yds.) ⁴
FL	Pinellas Plant	VOCs	10	91,500	30
HI	Kauai Test Facility	Chemical waste	930	7,400	Undetermined
IA	Ames Laboratory	Uranium, thorium, tritium, mercury, thallium, potassium, lithium, diesel fuels, kerosene	1,270	30	150
ID	Argonne National Laboratory-West	Uranium, thorium, tritium, heavy metals, PCBs, organic corrosives, dioxins/furans, sodium	750	Not reported	200
	Idaho National Engineering Laboratory	Heavy metals, PCBs, acids, asbestos, solvents, low-level radioactive waste, trans-uranic waste	851,720	989,540	33,380
IL	Argonne National Laboratory-East	Radionuclides, VOCs, SVOCs, PAHs, PCBs, arsenic, chromium, pesticides, aromatic hydrocarbons, chlorinated benzenes, heavy metals, lead (soil, ground water, and sediments); cobalt ⁶⁰ , iron, nickel, lead, tritium, uranium ^{235/238} , beryllium, cadmium, plutonium ²³⁹ , americium ²⁴¹ , mixed fission products (reactors and reactor facilities)	125,630	434,750	685,420
	Madison	Uranium	10	NA	NA
	Site A/Plot M, Palos Forest Preserve	VOCs, SVOCs, heavy metals, radioactive waste	6,540	Undetermined	Undetermined
KY	Paducah Gaseous Diffusion Plant	Petroleum hydrocarbons, PCBs, uranium, technetium ⁹⁹ , mercury (soil and sediments); TCE, technetium ⁹⁹ (ground water)	756,850	89,781,060	37,650

**Exhibit D-2: Contaminants and Contaminated Media Volumes To Be Remediated
at DOE Installations Where Characterization and Assessment Are Ongoing (continued)¹**

State	Installation/Site	Examples of Contaminants of Concern ^{2,3}	Estimated Soil/Sediment Volume To Be Addressed (Cu. Yds.) ⁴	Estimated Ground-water Volume To Be Remediated (Cu. Yds.) ⁴	Estimated Rubble/Debris Volume To Be Remediated (Cu. Yds.) ⁴
MA	Chapman Valve	Uranium	Not reported	NA	Not reported
	Shpack Landfill	Uranium residues, radium	9,370	NA	NA
MD	W.R. Grace & Company	Thorium	Not reported	NA	Not reported
MO	Kansas City Plant	PCBs, VOCs, metals, solvents, petroleum hydrocarbons	32,230	110,290	3,110
	St. Louis Airport Site	Uranium processing residues	250,000	NA	NA
	Weldon Spring Site	Low-level radioactive, chemical, and mixed wastes	321,940	650,200	163,090
NJ	DuPont & Company	Uranium	8,270	NA	⁷
	Maywood Chemical Works	Thorium tailings	395,000	NA	NA
	New Brunswick Site	Radium, uranium	4,500	NA	NA
	Princeton Plasma Physics Laboratory	Petroleum hydrocarbons, solvents	Not reported	Not reported	Not reported
	Wayne	Thorium, thorium tailings	109,000	NA	⁷

**Exhibit D-2: Contaminants and Contaminated Media Volumes To Be Remediated
at DOE Installations Where Characterization and Assessment Are Ongoing (continued)¹**

State	Installation/Site	Examples of Contaminants of Concern ^{2,3}	Estimated Soil/Sediment Volume To Be Addressed (Cu. Yds.) ⁴	Estimated Ground-water Volume To Be Remediated (Cu. Yds.) ⁴	Estimated Rubble/Debris Volume To Be Remediated (Cu. Yds.) ⁴
NM	Ambrosia Lake	Radon, heavy metals, radium, thorium (soil); chromium, molybdenum, net gross alpha, nitrate, radium ^{226/228} , selenium, uranium (ground water)	2,000,000 (RA ongoing)	Undetermined	NA
	Gassbuggy Site	Organic compounds, hydrocarbons, radionuclides, beryllium, lead	6,000 ⁸	Undetermined	Undetermined
	Gnome Coach Site	Organic compounds, hydrocarbons, radionuclides, beryllium, lead	⁹	Undetermined	Undetermined
	Los Alamos National Laboratory	Radionuclides, VOCs, SVOCs, heavy metals, high explosives, PCBs, asbestos, pesticides, herbicides (soil); tritium, cesium, strontium (ground water)	12,694,000	13,770	Not Reported
	Sandia National Laboratory-Albuquerque	PCBs, radionuclides, metals, petroleum hydrocarbons, high explosives, VOCs, SVOCs	772,500	40	24,800
	Shiprock	Net gross alpha, nitrate, radium ^{226/228} , selenium, uranium (ground water)	Complete	Undetermined	NA
NV	Central Nevada Test Site	Organic compounds, hydrocarbons, beryllium, lead, plutonium, tritium	6,000 ¹⁰	Undetermined	Undetermined
	Nevada Test Site	Organic compounds, hydrocarbons, beryllium, lead, plutonium, tritium	18,931,550	104,900	5,320
	Shoal Test Site	Organic compounds, hydrocarbons, beryllium, lead, plutonium, tritium	¹¹	Undetermined	Undetermined
	Tonopah Test Range	Organic compounds, hydrocarbons, beryllium, lead, plutonium, tritium	¹¹	Undetermined	Undetermined

**Exhibit D-2: Contaminants and Contaminated Media Volumes To Be Remediated
at DOE Installations Where Characterization and Assessment Are Ongoing (continued)¹**

State	Installation/Site	Examples of Contaminants of Concern ^{2,3}	Estimated Soil/Sediment Volume To Be Addressed (Cu. Yds.) ⁴	Estimated Ground-water Volume To Be Remediated (Cu. Yds.) ⁴	Estimated Rubble/Debris Volume To Be Remediated (Cu. Yds.) ⁴
NY	Ashland Oil CO.#1	Uranium ore tailings	Not reported	NA	NA
	Ashland Oil Co.#2	Uranium ore tailings	52,100	NA	NA
	Bliss & Laughlin	Low-level radioactive waste, uranium (trace)	Not reported	NA	NA
	Brookhaven National Laboratory	Uranium, plutonium, cesium ^{134/137} , tritium, strontium ⁹⁰ , cobalt ⁶⁰ , sodium ²² , radium ²²⁶ , metals, organics	38,930	56,993,590	520
	Linde Air Products	Uranium ore tailings	70,000	NA	NA
	Seaway Industrial Park	Uranium ore tailings	Not reported	NA	NA
	Separation Process Research Unit	Plutonium, stontium ⁹⁰ , cesium ¹³⁷	Undetermined	NA	Undetermined
OH	B and T Metals	Uranium	NA	NA	1,000
	Fernald Site	Uranium, thorium, oils, reactive chemicals, organic compounds	1,236,650	512,500,000	302,250
	Luckey	Beryllium, uranium (traces)	64,000	NA	NA
	Mound Plant	VOCs, petroleum hydrocarbons, tritium, plutonium, thorium (soil); tritium (ground water)	200,990	890,690	36,100
	Portsmouth Gaseous Diffusion Plant	Low-concentration radionuclides, chlorinated solvents, PCBs, heavy metals	32,280	741,230	71,160
	RMI Site	Uranium, TCE, technitium	35,520	620	5,830
OR	Lakeview Site	Arsenic, cadmium (ground water)	Complete	Undetermined	NA
PA	Canonsburg Site	Uranium	Complete	Undetermined	NA

**Exhibit D-2: Contaminants and Contaminated Media Volumes To Be Remediated
at DOE Installations Where Characterization and Assessment Are Ongoing (continued)¹**

State	Installation/Site	Examples of Contaminants of Concern ^{2,3}	Estimated Soil/Sediment Volume To Be Addressed ^a (Cu. Yds.) ⁴	Estimated Ground-water Volume To Be Remediated (Cu. Yds.) ⁴	Estimated Rubble/Debris Volume To Be Remediated (Cu. Yds.) ⁴
PR	Center for Environmental Research	Asbestos, PCBs	Not reported	Not reported	Not reported
SC	Savannah River Site	TCE, PCE, aluminum, zinc, arsenic, cadmium, chromium, lithium, mercury, lead, strontium ⁹⁰ , cesium ^{137/139} , cobalt ⁶⁰ , tritium, thorium	11,276,500	406,809,230	714,000
TN	Oak Ridge K-25 Site	Asbestos, petroleum hydrocarbons, PCBs, radionuclides (principally uranium), mixed waste	4,900	1,249,440	109,560
	Oak Ridge National Laboratory	Strontium ⁹⁰ , cesium ¹³⁷ , cobalt ⁶⁰ , tritium, PCBs, heavy metals, mixed waste	92,870	90,330	60,920
	Oak Ridge Reservation Offsite	Radionuclides (cesium ¹³⁷ , cobalt ⁶⁰ , tritium, strontium ⁹⁰), mercury, lead, arsenic, selenium, chromium, PCBs, dioxin, chlordane, polychlorinated hydrocarbons	136,960	10	Not reported
	Oak Ridge Y-12 Plant	Radionuclides (depleted uranium and uranium ²³⁵), nitrates, organic solvents, PCBs, beryllium compounds, asbestos, mercury, cadmium	464,910	4,689,070	119,750
TX	Falls City Site	Molybdenum, uranium (ground water)	Complete	Undetermined	NA
	Pantex Plant	Organic solvents, high explosives, heavy metals	5,080	30	Not reported
UT	Green River Site	Arsenic, cadmium, chromium, lead, molybdenum, net gross alpha, nitrate, radium ^{226/228} , selenium, uranium (ground water)	Complete	Undetermined	NA
	Mexican Hat Site	Chromium, molybdenum, net gross alpha, nitrate, radium ^{226/228} , selenium, uranium (ground water)	Complete	Undetermined	NA

**Exhibit D-2: Contaminants and Contaminated Media Volumes To Be Remediated
at DOE Installations Where Characterization and Assessment Are Ongoing (continued)¹**

State	Installation/Site	Examples of Contaminants of Concern ^{2,3}	Estimated Soil/Sediment Volume To Be Addressed (Cu. Yds.) ⁴	Estimated Ground-water Volume To Be Remediated (Cu. Yds.) ⁴	Estimated Rubble/Debris Volume To Be Remediated (Cu. Yds.) ⁴
UT (continued)	Monticello Remedial Action Project	Radium, uranium, thorium, polonium, radon	2,922,460	NA	¹²
	Salt Lake City Site	Molybdenum, selenium, uranium (ground water)	Complete	Undetermined	NA
WA	Hanford Site	Tritium, cobalt, strontium, cesium, technitium, plutonium, uranium, carbon tetrachloride, nitrates, iodine, chromium, mixed waste, transuranic waste	83,840,000	26,000,000	Not reported
WY	Riverton Site	Molybdenum, net gross alpha, radium ^{226/228} , selenium, uranium (ground water)	Complete	Undetermined	NA
	Spook Site	Chromium, nitrate, radium ^{226/228} , selenium, uranium (ground water)	Complete	Undetermined	NA

Notes:

NA = Not Applicable

- ¹ Installations and other locations included in this table are the same as those listed in Exhibit 7-2 in the text of the Chapter.
- ² U.S. Department of Energy, "Estimating the Cold War Mortgage: The 1995 Baseline Environmental Report," DOE/EM-0230, March 1995; DOE/EM-40 Contaminated Media/Waste Database as of March 3, 1995; and U.S. Department of Energy, UMTRA Project Office, "Draft Program-matic Environmental Impact Statement for the Uranium Mill Tailings Remedial Action Ground Water Project," DOE/EIS-0198, April 1995.
- ³ When specific contaminant types were not available from the references cited in endnote 2, available waste class information has been provided to give an indication of the types of contaminants that may be present.
- ⁴ U.S. Department of Energy, "Estimating the Cold War Mortgage: The 1995 Baseline Environmental Report," DOE/EM-0230, March 1995, and DOE/EM-40 Contaminated Media/Waste Database as of March 3, 1995. Volume estimates have been rounded for inclusion in this table. Not all of the contaminated soil volume shown will be remediated—treated or disposed of—because a portion of the volume at some locations is below the proposed cleanup level for that location.

**Exhibit D-2: Contaminants and Contaminated Media Volumes To Be Remediated
at DOE Installations Where Characterization and Assessment Are Ongoing (continued)¹**

Notes (continued):

- ⁵ Includes estimated volumes for Project Rio Blanco and Project Rulison.
- ⁶ See Project Rio Blanco.
- ⁷ Included in Estimates Soil/Sediment Volume shown for this site.
- ⁸ Includes estimated volumes for Gassbuggy Site and Gnome-Coach Site.
- ⁹ See Gassbuggy Site.
- ¹⁰ Includes estimated volumes for Central Nevada Test Site, Shoal Test Site, and Tonopah Test Range.
- ¹¹ See Central Nevada Test Site.
- ¹² Included in Estimated Soil/Sediment Volume shown for this site.